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ABSTRACT

This document is the reply of the Eugene school district's research, development, and evaluation division to portions of a citizen task force report on small schools in the district. The analysis takes issue with certain findings concerning population and enrollment trends, economics, program capacity, staffing, and the criteria for the evaluation of low enrollment schools. Appendixes contain explanatory material. (IRT)

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AN ANALYSIS OF THE SMALL SCHOOLS TASK FORCE FINAL REPORT

EA 008 739

Research, Development and Evaluation
School District 4J
200 North Monroe
Eugene, Oregon 97402

March, 1976

AN ANALYSIS OF THE SMALL SCHOOLS TASK FORCE
FINAL REPORT

The Task Force is to be commended for the amount of effort and work that went into the preparation of the report. This was a monumental task that required a long term committment of time, energy and diligence on the parts of all members of the group.

Chapter II Population and Enrollment Trends

On page 10 of this report, Chapter II, the Small Schools Task Force concluded the followirg: "There is an excellent chance that by the year 2,000 enough children will reside within walking distance of all existing elementary schools to eliminate the need for extensive busing or radical attendance area boundary shifts". This conclusion is drawn from a report produced by the Lane Council of Governments in January, 1974, entitled "Population and Employment Projections for Lane County Oregon". From an assessment of that L-COG report, the Task Force projects, on page 9, that there will be sufficient elementary age children to fill existing district schools in 25 years. They also state, "We find it more difficult to make similar projections by area for the next ten years from 1976 through 1985". Jim Johnson and Gary Chenkin filed a report to the Small Schools Task Force on December 4, 1975. The title is "Further Information on Population Projections" (Appendix 1). This report explains the assumptions built into the year 2,000 population projections and the five year breakdowns contained therein. Johnson and Chenkin state, "The main reason for this further explanation is the prevailing opinion, first suggested by 4J R & D and then supported by us, that the Task Force has not been fully informed of all of the assumptions and therefore has placed too much emphasis on the population data we provided. The purpose of what follows is twofold, to inform you of the assumptions and to suggest how the Task Force should use and interpret the data". With that memo, enclosed as an appendix to this report, 4J's RDE unit no longer has any disagreement with the population projections for the metropolitan area for the year 2,000, nor to the comments made in the Small Schools Task Force report regarding population projections for the year 2,000. If anything, we believe that those projections

are accurate or possible understatements of what will occur in this community by the year 2,000. We do however have the following concerns. These concerns arise from an examination of Chapter 2 of the Small Schools Task Force Report, the assumptions derived therein and the conclusions on Page 10 of that report:

The distribution of the population within the residential area surrounded by the boundaries of the 4J School District which are outside the boundaries of the Eugene city limits are challenged. One of the assumptions contained in much of the reporting on the population projections, as well as the additional data supplied to the Task Force by other people such as Johnson and Chenkin, is that the population within the metropolitan area by the year 2,000 will be distributed according to zoning in the metropolitan area, including the central city area to the degree where there will actually be sufficient numbers of children to fill all existing space. We have not seen in 4J's RDE unit any data or any study presented that will identify where the population that is projected by the year 2,000 will reside by any sub-geographic area analysis such as census tracts or school district boundary lines. Further, we are not aware of any study that identifies the growth of population within the boundaries of the Eugene 4J school district. In other words, we do not challenge the total number of people residing in this metropolitan area by the year 2,000 as projected by the various studies noted above. We do not believe however, that the population, including school age children, will necessarily reside in sub-geographic boundaries within the metropolitan area and more specifically within the Eugene 4J school district area where there is space or where there will be space in classrooms.

Population projections are based on births, deaths and migration patterns. Depending on the purpose of such projections, many other assumptions may be built into the analysis.

Births and deaths are, to a large extent, not affected by planning decisions. On the other hand, rates of migratory patterns assume that: (1) certain forces are expected to predominate, or (2) planning decisions will create environmental momentum to effect certain forces.

These population projections from L-COG were completed for a metropolitan transportation plan. Therefore, assumptions about migratory patterns were made that may have little applicability to educational planning.

Population projection for 4J may be based on many of the same assumptions as the one prepared for the metropolitan transportation plan. Caution should be taken, however, in attempting to directly overlay L-COG's projection on 4J boundaries.

Although a population projection has not been completed for 4J, there are some current trends which should be examined prior to any final decision regarding school closure. At present, data is available on occupancy permits and building permits issued. These data indicate the percentage change from 1970 to 1975. Declines are noted in the central areas and significant increases are indicated in the outlying areas, particularly north of the Beltline in the Santa Clara area. It should be noted that building permits for new construction will show a significant decline as available space is developed. In outlying districts percentage change may seem significant but when analyzed in absolute numbers might not be significant. That is, an area with ten structures may experience a 40% increase with four new structures. In a developed area, 30-40 new structures will indicate a small percentage increase.

L-COG is in the process of developing a census tract by tract population estimate. These data should be compared with 1970 census data for fairly accurate estimates on in-filling trends. This report will be completed by the end of March, according to L-COG staff.

Two polar-type forces are apparent in this metropolitan area (the suburban movement and the attempt to contain growth and revitalize central residential areas). Based on existing conditions, it is reasonable to expect that educational spaces will be vacant in the southern area of Eugene for some time. Based on opposing forces to current trends, those spaces may be utilized in the future.

Chapter III Economics

On page 24, the Task Force Report makes this conclusion: "Actual savings which could be realized by closing a school fall into the range of between $17,000 - $50,000". The Task Force believes that this savings estimate is realistic in the light of other cities' experiences as summarized in this chapter. RDE was not asked, nor has it studied potential benefits resulting from (1) closing of a school or schools, (2) temporarily closing an entire school or part of a school, or (3) keeping the school building open but leasing it to another party or using the building for non-classroom educational space. The Task Force Report

only considers the economics of total closure in Chapter III and recommends, on page 57, that leasing be considered, but does not analyze the economics of leasing.

The Task Force Report states, on page 15, "With regards to the Capital Outlay expense, we see that it is a small percentage figure and by nature highly irregular and non-comparable". This conclusion is subjective for three reasons; (1) many people would consider $306,000 to be a lot of money, (2) excluding Capital Outlay minimizes the cost incurred for 1974-75 for running the schools especially if that cost is analyzed over the four regions to show whether or not there was an equitable distribution of Capital Outlay resources provided to each of the four regions within the school system, and (3) some capital expense will be incurred if the schools are open.

Page 14 of the Small Schools Task Force Report states, "Generally speaking there do not appear to be significant variations among the schools (with regard to the relative efficiency, i.e., maintenance costs of school facilities)". This "significance" is subjective. It would appear that there may be systematic variation between the North and South regions for the actual costs for maintenance. For example, it appears that it costs more for maintenance for a majority of elementary schools in the North region but even taking this into account, there appears to be more total costs in the South region for maintenance. This is probably due to the greater number of buildings in the South region. We believe that a more accurate analysis of cost related to these issues exists in a recent RDE report entitled "Study of Resource Distribution With 4J School District by Region". We suggest that this report be submitted as a part of the data to be used to make decisions regarding small schools. It should be noted that this study was not completed until after the Task Force had filed their report.

Chapter VIII Program Capacity

On page 47 there is a statement in the Small Schools Task Force Report that RDE questions. That statement is as follows: "Thus the minimum standard size classroom becomes 900 square feet. District 4J's program capacity allots 25 students to most classrooms regardless of size. Therefore students in a standard classroom are alloted 36 square feet while those in a classroom of 750 square feet have only 30 square feet each".

The program capacity definition disagrees with the statement on page 47: "The

program capacity differs from optimum capacity in that it sets an upper limit of 25 students per classroom instead of 30 as optimum capacity and state law does and it recognizes reduced capacities for special education programs and/or other special programs". So that District 4J's program capacity allots 25 students to most classrooms regardless of size is not absolutely correct. If a classroom is less than 750 square feet in size, there are fewer than 25 children assigned to that space, and if there is a classroom space that is 500 square feet or less, no children are assigned to that space and it is not counted in the program capacity of a building. In addition to the Task Force Report, the chairman of the Small Schools Task Force submitted a suggestion for a revision of the capacity study wherein he has suggested such things as doubling the amount of space not allocated for certain classrooms such as kindergartens (Appendix 2).

The issue to be concerned with on the comments about the capacity study and capacity within the building are as follows. The capacity study was done to provide, as equitably as possible, space allocations within the school district in such a way as to allow flexibility of educational programs and to allow the best utilization of the available space that we currently possess for educating children within the 4J school district. The analysis in the final chapter of the capacity study suggests one major area of concern -- recently built large elementary buildings constructed with insufficient amounts of ancillary space. The capacity study in fact identifies the necessity for additional ancillary space within most of these schools. In essence, the chairman of the Task Force's suggestion would reassign primary space to additional ancillary space in many schools, a condition that RDE could agree with but one that is extremely unrealistic in that there is already limited primary educational space in many recently built large elementary schools and in many elementary schools that are almost at capacity. The Task Force Report, on page 46, suggests four major revisions to the capacity study; (1) the program capacity for kindergarten classes should be decreased, (2) program capacity should be modified to provide greater amounts of ancillary space in some schools where ancillary space was not provided to an equitable degree when the building was built, (3) adjustments should be made in program capacity for those schools which have Title I programs and (4) program capacities for small classrooms should be decreased. RDE maintains that program capacity space assigned to kindergaretn classrooms falls both within the boundaries of acceptability by an educational point of view as well as within the acceptability of space provisions from the State Minimum Standards which we have commented on earlier. Basically we do not see how it is feasible to remove primary educational space

from some school buildings within the district and add that to ancillary space when in those same buildings we find that the total amount of primary space is already taken up by the numbers of children in those buildings. We have no comments about adjustments to program capacity for Title I programs, that is something that we may need to do as a necessary modification of the capacity study, however we know that it is not a legal necessity. We have commented earlier on program capacities for small classrooms being decreased and suggest that program capacity for small classrooms has in fact been decreased according to a formula agreed to by all the educators that reviewed this study within the school district. Conclusion: The capacity study clearly points out some form of discrimination in the provision of space to children in larger crowded elementary schools. It is hereby suggested that one way that the inequalities pointed out in the capacity study could be resolved is by the provision of greater amounts of ancillary space within the buildings noted in that survey.

The Task Force Report suggests that where there has been more sufficient amounts of primary and ancillary educational space, within a school in the district, that space has been used constructively. RDE has no disagreement with that comment. The issue however, is the lack of equal opportunity for the constructive use of space in other schools within the district. There does not reside within some schools currently at capacity, the equal opportunity to constructively utilize space within the building as it does within those buildings where the buildings are not being utilized up to capacity. This is an issue that we should be addressing.

There is a general rule of thumb that educators are aware of, concerning the utilization of space within a building, and that is that space will be used regardless of how much there is of it. The important issue within a school system is the equitable distribution of that space whereby educational alternatives can occur becasue space is available and every child within the school district should have an equal opportunity for those educational alternatives simply because there is not space in the building where the child attends school.

Chapter IX Staffing

We agreed with the conclusions drawn by the Small Schools Task Force in this section with one exception and that is the recommendation that the school district immediately rescind that partof the staffing plan which arbitrarily reduces the staffing level of the four small schools by .5 FTE and increases the level of the

four largest schools a corresponding amount. If one will analyze the data that generated the new staffing plan, one will notice that in the past there was an unequal distribution of staff, both by level - elementary, junior and senior highs and by region within this school district. One way of providing equitable distribution of staff was by the part of the plan which reduced the administrative staffing level of the four smallest schools and increased it in the larger schools.

Chapter XI Criteria for the Evaluation of Low Enrollment Schools

The Task Force Report has a number of comments in it that should be highlighted. On page 61, section G, the statement, "What impact would school closures have on the neighborhood, both on the human character of the area and on property values?" On page 63, "The Task Force recommends that Whiteaker School should not be closed because of the city's efforts to stabilize the inner city". And on page 64, "The city is committed to the stabilization of inner city neighborhoods and regards this school as integral to those plans.....closure would have a decisive impact on the Lincoln neighborhood, families with small children would be discouraged from settling there." All of this revolves around the central issue of whether or not the board of directors of the 4J school district should utilize funds (provided to it by taxpayers to educate children) to subsidize goals of the incumbent political administration. It is our belief that this course of action may not be legal. If the board continues to maintain buildings that are under-utilized to support a political goal the district should request the Attorney General's opinion as to whether a district can legally subsidize political goals with monies provided for education. If we choose, as a school district, to keep the school buildings open where membership is below a cost effective level, then we might request that the political administration reimburse the school district the difference of the costs between optimum and actual membership levels, utilizing those resources to alleviate overcrowding in other areas of the school system. Out of this suggestion we recommend that the school district identify costs for building space, heat, maintenance, staffing, supplies, equipment, material, etc., and allocate those costs on a per pupil basis, making monies available within the school district, predicated upon the number of children served in each building, and not predicated upon any current goals of a political administration unless that administration is willing to pay for it's pleasure.

We must honestly admit that we have a substantial number of spaces in the school district that are currently under-utilized. It would seem foolhardy for us as a school district to request the taxpaying public to subisdize further revenue to

develop and build spaces where they are needed when we currently own spaces that are under-utilized. In the near future, based on current trends, the district is going to have to provide additional space in the North region, the west edges of the Churchill region and the north edges of the Sheldon region.

MEMORANDUM

TO: SMALL SCHOOLS TASK FORCE

FROM: JIM JOHNSON AND CARY CHENKIN

DATE: DECEMBER 4, 1975

SUBJECT: FURTHER INFORMATION ON POPULATION PROJECTIONS

This memo is designed to communicate to the Task Force some of the assumptions built into the scenarios for distributing the year 2000 population figures. If you remember, these three scenarios (L-COG, Planners, and "Alternative 5") are the basis for our conclusion that all schools are likely to be filled to program capacity in the year 2000.

The main reason for this explanation is the prevailing opinion (first suggested by 4J R&D and then supported by us) that the Task Force has not been fully informed of all the assumptions and therefore has placed too much emphasis on the population data we provided. The purpose of what follows is two-fold: to inform you of the assumptions and to suggest how the Task Force should use and interpret the data.

Population projections for the metropolitan area, developed by L-COG, indicate that about 277,000 people will live within the area in the year 2000. Our first assumption surfaces--that the cohort survival methods of population projection provides a reasonably accurate estimate of the future population. This 277,000 figure is important because it is the base figure that was distributed in all three scenarios. Even the cohort survival method of population projection is filled with assumptions. We reviewed these in a previous meeting but to refresh your memory, the major assumptions here are fertility rates, survival rates, and labor force participation rates. Perhaps just as important are assumptions which are not a part of the projection method. No assumptions are made with regard to major social, political, economic, or technological change.

With the above in mind, we proceed to a larger number of assumptions which were made when groups of planners from Eugene, Springfield, and Lane County distributed dwelling units to transportation zones within the metro area boundary. These assumptions are attached as an appendix for your review.

While it is unnecessary to go into great detail about each of the assumptions, we feel that you should read and be aware of them. Keep in mind also that each of these assumptions has a number of assumptions that are built-in--the first four for example. When reading through the assumptions it becomes clear that a lot of them consist of what could only be termed "soft" data. Someone could suggest variations of the assumptions that could be just as valid as the ones listed.

However, many of the assumptions listed are either directly or indirectly established as city or county goals and policies. Decisions are made every day based on these goals and policies.

Given the above, we suggest that the correct way of interpreting and using the data we provided is to view it as a forecast and projection of the future--not as a prediction of what will occur. The conclusions reached from analyzing the population data are important, but not any more important than any other conclusions we as a Task Force may reach.

In summary, we still feel that the information presented in the population subcommittee report is valid. However, we will qualify it somewhat by providing a more complete explanation of all the assumptions involved.

dy

Attachment

PROPOSED ASSUMPTIONS

(E-SATS Update - August 1, 1973)

Assumptions not supported by adopted policy will not be used as policy themselves, but will be used only for forecasting purposes.

Population

1. Birth rates will continue to decrease.

2. Death rates will continue to increase slightly.

3. The major impact on metropolitan population growth will increasingly be in-migration.

4. The community will develop increasing resistance toward population growth.

5. From 1964 to 1970, population growth of the metropolitan area has averaged 2.5 percent per year compounded. Anticipated growth of the Eugene-Springfield area to the year 2000 will be:

1970 to 1975 @ 2.25% increase per year	=	165,350
1975 to 1980 @ 2.20% increase per year	=	184,360*
1980 to 1990 @ 2.00% increase per year	=	224,700*
1990 to 2000 @ 1.80% increase per year	=	268,600*

* These figures are tentative and will be revised during the update process.

6. University of Oregon enrollment will increase from 15,432 in 1972-73 to 16,154 by 1979-80 and to 16,880 by 1984-85. Top enrollment will be 20,000.

Housing

1. Apartment house construction will account for a high percentage of new housing, but will be considerably lower than during recent years.

2. Mobile home living and single family housing will account for more than 50 percent of new construction.

3. The average number of people per household will decrease to 2.8.

Proposed Assumptions (con't.)

4. New housing by types will be:

Multiple Housing	36%
Duplex	10%
Single Family (and low density town housing)	38%
Mobile Homes	15%
Group Dwellings	1%

Area of Geographic Development

1. The transportation zone boundaries will not be modified for the 1973-74 update except to include land in the southwest corner of the 1964 transportation zone boundaries which were omitted when adjustments were made to conform with census tracts.

2. It is anticipated that the Eugene-Springfield metropolitan urban limits for the foreseeable future will be within the "1990 urban service area."*

3. Land outside of the "1990 urban service area" to Eugene and Springfield will be generally maintained as rural tracts that will not generate a need for urban utilities or facilities.

4. Traffic to the metropolitan area from the satellite communities will be projected from the anticipated growth as cited in the adopted plans or interim reports (in lieu of adopted plans) for those communities.

5. Privately owned undeveloped land zoned for low density residential use will be tested at two levels of density: (a) four dwellings per gross acre; and (b) ten dwelling units per gross acre, regardless of the topography, geography, or geology of the area.

   Similarly, in areas zoned for low density residential use, partially developed tracts of land of one-third acre or more will be tested for further dwelling development at a rate of one dwelling unit for each 6,000 square feet of net area.

   Unused and partially used land in more intense residential zones will be tested for the density allowed in such zones.

   As a result of the above density assumptions, initial test systems will be run subject to the variables as listed on the following page:

* Assumption made for initial testing.

Proposed Assumptions (con't.)

Test System	Intensity of New Residential Development	Modal Split (% Trips on Non-Auto Modes)	Street Network
A	Low (4 units/acre)	Low	Existing
B	Low	High	Existing
C	High (10 units/acre)	Low	Existing
D	High	High	Existing
E*	Low	Low	Future
F*	Low	High	Future
G*	High	Low	Future
H*	High	High	Future

6. It is recognized that utilities and facilities in many areas are inadequate for full development.

7. Assumed Policy on Direction, Intensity, Density, and Scheduling of Urban Growth

The use of land for urban development is a privilege that may be exercised within the restraints of local government. The use, direction, intensity, density, and scheduling of urban growth is subject to both adopted land use regulations and the capability of local governments to provide all of the basic urban services considered necessary for the health, safety, morals, and general welfare of the citizens who will live, work, and/or in any way use the area to be urbanized.

Capability of serving applies to all units of local governments or public utilities which collectively share the responsibilities for rendering all of the urban services including, but not necessarily limited to, roads, highways, mass transit, sidewalks, bicycle routes, sanitary sewers, sewage treatment facilities, storm sewers, domestic water, fire protection, police protection, parks and recreation, schools, electric service, and solid waste collection and disposal.

The urban community will not allow urban growth to extend in direction, intensity, or density beyond the existing physical or financial capability of each serving agency, nor will it allow the intensification or extension of urban development which will consume reserves in service capacity which were planned and paid for by others but not currently used.

8. Vacant land in undeveloped and partially developed residential neighborhoods will be discounted up to 15 percent of the gross acres in each neighborhood minus the current acres used or retained for use as public parks, schools, places of public assembly, and service facilities. The discounted percent would reflect the approximate amount of land that would be needed for public and quasi-public

*Subject to alteration in view of the results of the first four test systems.

(non-residential) development. Each transportation zone would be separately evaluated.

9. The location and development of major shopping centers will not materially change between now and the year 2000. Neighborhood shopping centers will increase primarily in areas that are now largely undeveloped. Neighborhood centers will be spaced approximately one mile apart.

10. Industrial development will continue in the now existing patterns.

11. The cities of Eugene and Springfield will continue to be the sole providers of sanitary sewer service to areas within the metropolitan area. Sanitary sewer service will be extended to Santa Clara/River Road area by the year 2000.

12. The density ranges outlined in the 1990 Plan and in those community plans adopted in conformity with it will be used to determine appropriate density ranges for undeveloped areas. Existing plans, development patterns, and zoning districts will provide the basis for determining land uses.

13. Automobiles will continue to provide the major method of personal transportation.

14. The cohort survival method of population projection provides a reasonably accurate estimation of the future population.

APPENDIX 2

December 3, 1975

To : Task Force

From : Mike Shellenbarger

Subject: Analysis and Proposed Revision of Program Capacity Data

Summary: Program capacity is currently unrealistically high. It forces students in smaller classrooms into state minimum standards and "a relatively rigid educational program" while allowing a more reasonable standard for larger classrooms. It does not take into account the kindergarten program, and it ignores the substantial inequity that exists in the availability of ancillary spaces. By correcting these factors total elementary program capacity is approximately 10,600, or only 500 in excess of current enrollment -- not 1,900 or 2,500 as previously thought.

Report: This is a proposed revision to the district's program capacity figures. It is very preliminary and for discussion purposes only. It incorporates the following major revisions:

1 - The capacity for kindergarten spaces is proposed to be lower than for other classes following the practice nationally for allocating more space at this level to fewer pupils. Castaldi (Creative Planning of Educational Facilities, 1969) recommends 1,100 to 1,300 square feet for 20 children. I have used 60 square feet per child as a standard. The following study assumes the number of kindergarten rooms at each school since only kindergarten enrollment and not room count was known. The largest rooms available at each school were assumed to be the kindergartens. Errors introduced by assuming the wrong sizes will not be major.

2 - "Program Capacity" is defined as being a more reasonable capacity than "optimum capacity" which strictly adheres to state minimum standards: thirty students in a class at 30 square feet per student. Program capacity sets a maximum number of 25 students per class, so that the same 900 square foot minimum classroom would have 36 square feet per student. In the calculation of program capacity, however, thirty square feet per student is used which results in the distinction between program and optimum capacities reducing below 900 square feet and disappearing altogether at 750 square feet. This forces students in smaller classrooms into state minimum standards and, according to the district's report, "a relatively rigid educational program" while allowing a more reasonable standard in larger classrooms. This also penalizes schools like Edison and Spring Creek which have all smaller classrooms. This seems unreasonable and contrary to the intent of the program capacity analysis. The proposal which follows uses 36 square feet per pupil for these smaller classrooms.

3 - One of the most interesting facets of the district's capacity study is the identification of ancillary space. The amount of this space available varies widely from school to school, as we heard at the meeting with the principals. At Spring Creek the counselor has to counsel students in the custodian's closet. The revision I am proposing attempts to correct these unequal and tight conditions by comparing each school

with the average ancillary space available per student at all schools. I am omitting "maintenance ancillary space" (boiler rooms, hallways, etc.) because it is more architectural than educational. The study below uses a per pupil average based on program capacity, not on current enrollment so as to remove distortions present in the district's study which have resulted from low or inflated enrollments in some schools. I assumed an approximate total district capacity of 11,000 for this computation; this turned out to be a little high but the small errors introduced are within reason for this preliminary study. Schools with more than average ancillary space were not assigned additional program capacity since it is unlikely that the space could be converted to classroom use. Schools with less than average ancillary space receive additional space in this study by the conversion of the number of classrooms necessary to approach the amount of space required. For purposes of this study the smallest available classrooms were selected for conversion. This conversion reduces program capacity to a more reasonable and equitable level.

Revision by Schools: The first example is explained in more detail and the same calculation procedure applies to all schools.

	Reduction in Program Capacity	New Program Capacity
Adams		
A - 1 kindergarten for 20 not 25		- 5
B - 2 950 square foot classrooms become support space (the average support space per pupil is 33.5 square feet assuming 11,000 program capacity) 33.5 x 395 = 13,232 square feet of support space. This is approximately equal to the new actual support space of 10,773 square feet + 1,900 = 12,633.		-50
TOTAL		-55
New program capacity (450 - 55) =	395	
Awbrey Park		
A - 1 kindergarten for 20 not 25		- 5
1 small kindergarten (973 ÷ 60) = 16 not 25		- 9
B - Six smaller classrooms (802 or 804 sq. ft.) @ 36 sq. ft. per student = 22 not 25		-18
C - 2 classrooms become support (33.5 x 539 = 18,056) ≈ (16,042 + 1,608 = 17,650)		-44
TOTAL		-76
New program capacity (625 - 76) =	549	
Bailey Hill		
A - 1 kindergarten for 20 not 25		- 5
2 small kindergartens (1,058 ÷ 60) for 18 not 25		-14
B - 3 small classrooms (833 to 843 each) for 23 not 25		- 6
C - 1 classroom becomes support (33.5 x 333 = 11,155) ≈ (10,176 + 858 = 11,024)		-25
TOTAL		-50
New program capacity (383 - 50) =	333	

	Reduction in Program Capacity	New Program Capacity
Coburg		
A - 1 kindergarten (868 ÷ 60) for 15 not 25		-10
B - 8 small classrooms (852 to 858 each) for 24 not 25		- 8
C - support spaces okay		
TOTAL		-18
New program capacity (225 - 18) =	207	
Condon		
A - 1 kindergarten for 20 not 25		- 5
B - support space okay		
TOTAL		- 5
New program capacity (315 - 5) =	310	
Crest Drive		
A - 2 kindergartens (1,066 ÷ 60) for 18 not 25		-14
B - support space okay		
TOTAL		-14
New program capacity (250 - 14) =	236	
Dunn		
A - 1 kindergarten (951 ÷ 60) for 16 not 25		- 9
B - 1 small classroom (677) for 19 not 22		- 3
1 small classroom (763) for 21 not 25		- 4
3 small classrooms (834) for 23 not 25		- 6
C - support space okay		
TOTAL		-22
New program capacity (373 - 22) =	351	
Edgewood		
A - 2 kindergartens (879 ÷ 60) for 15 not 25		-20
B - 13 small classrooms (856 to 879) for 24 not 25		-13
4 small classrooms (843) for 23 not 25		- 8
C - support space okay		
TOTAL		-41
New program capacity (475 - 41) =	434	
Edison		
A - 1 kindergarten (769) for 13 not 25		-12
B - 5 small classrooms (611 to 617) for 17 not 20		-15
1 small classroom (598) for 17 not 19		- 2
1 small classroom (657) for 18 not 21		- 3
2 small classrooms (733, 734) for 20 not 24		- 8
2 small classrooms (753, 764) for 21 not 25		- 8
C - 1 student room (772) for 21 not 25		- 4
D - support space okay		
TOTAL		-52
New program capacity (328 - 52) =	276	

	Reduction in Program Capacity	New Program Capacit
Fox Hollow		
A - 1 kindergarten (783) for 13 not 25		-12
B - 2 small classrooms (777) for 22 not 25		- 6
1 small classroom (756) for 21 not 25		- 4
4 small classrooms (659) for 18 not 21		-12
C - support space okay		
TOTAL		-34
New program capacity (184 - 34) =	150	
Gilham		
A - Everything okay		
Program capacity stays as is	325	
Harris		
A - 1 kindergarten (963) for 16 not 25		- 9
B - support space okay		
TOTAL		- 9
New program capacity (356 - 9) =	347	
Howard		
A - 2 kindergartens (967) for 16 not 25		-18
B - 5 classrooms become support space (4 @ 841 and 1 @ 512)		-116
33.5 x 432 = 14,472) ≈ (9,770 + 512 + 1,924) = 13,647)		
TOTAL		-134
New program capacity (566 - 134) =	432	
Laurel Hill		
A - 1 kindergarten (1,099) for 18 not 25		- 7
B - support space okay		
TOTAL		- 7
New program capacity (250 - 7) =	243	
Lincoln		
A - 1 kindergarten (1,092) for 18 not 25		- 7
B - 1 small classroom (807) for 22 not 25		- 3
1 small classroom (841) for 23 not 25		- 2
1 small classroom (868) for 24 not 25		- 1
C - support space okay		
TOTAL		-13
New program capacity (311 - 13) =	298	
Magladry		
A - 4 small classrooms (788 to 809) for 22 not 25		-12
2 small classrooms (831) for 23 not 25		- 4
B - support space okay		
TOTAL		-16
New program capacity (150 - 16) =	134	
McCornack		
A - Everything okay		
Program capacity stays as is	344	

	Reduction in Program Capacity	New Program Capacity
Meadow Lark		
A - 1 kindergarten (1,070) for 18 not 25		- 7
B - 5 small classrooms (857 to 869) for 24 not 25		- 5
C - 3 classrooms become support space		
(33.5 x 463 = 15,510) ≈ (11,656 + 825 + 820 = 14,126)		
TOTAL		-87
New program capacity (550 - 87) =	463	
Parker		
A - 1 kindergarten (1,080) for 18 not 25		- 7
B - 4 small classrooms (840) for 24 not 25		- 4
C - 1 classroom becomes support space		
(33.5 x 389 = 13,031) ≈ (10,826 + 840 = 11,666)		
TOTAL		-36
New program capacity (425 - 36) =	389	
Patterson		
A - 2 kindergartens (878) for 15 not 25		-20
B - 4 small classrooms (833 to 839) for 23 not 25		- 8
10 small classrooms (875 to 878) for 24 not 25		-10
C - 1 classroom becomes support space		
(33.5 x 337 = 11,289) ≈ (9,887 + 833 = 10,720)		
TOTAL		-63
New program capacity (400 - 63) =	337	
River Road		
A - 4 kindergartens (928, 911, 905, 899) for 60 not 100		-40
B - 9 small classrooms (868 to 878) for 24 not 25		- 9
C - 2 classrooms become support space		-50
(33.5 x 444 = 14,874) ≈ (12,929 + 860 + 862 = 14,651)		
TOTAL		-99
New program capacity (543 - 99) =	444	
Santa Clara		
A - 2 kindergartens (888) for 15 not 25		-20
B - 3 small classrooms (778 to 806) for 22 not 25		- 9
3 small classrooms (822) for 23 not 25		- 6
1 small classroom (874) for 24 not 25		- 1
1 small classroom (693) for 19 not 23		- 4
1 small classroom (600) for 17 not 20		- 3
C - support space okay		
TOTAL		-43
New program capacity (468 - 43) =	425	
Silver Lea		
A - 2 kindergartens (1,017, 1,009) for 17 not 25		-16
B - 4 small classrooms (826) for 23 not 25		- 8
3 small classrooms (874) for 24 not 25		- 3
1 small classroom (703) for 20 not 23		- 3
C - One classroom becomes support space		
(33.5 x 443 = 14,840) ≈ (13,643 + 703 = 14,346)		
TOTAL		-53
New program capacity (496 - 53) =	443	

	Reduction in Program Capacity	New Program Capacity
Spring Creek		
A - 2 kindergartens (926, 735) for 28 not 49		-21
B - 18 small classrooms (735) for 20 not 24		-72
C - 2 classrooms become support space		-48
(33.5 x 364 - 12,194) ≈ (10,395 + 736 + 736 = 11,867)		
TOTAL		-141
New program capacity (505 - 141) =	364	
Twin Oaks		
A - 1 kindergarten (923) for 15 not 25		-10
B - 1 small classroom (844) for 23 not 25		- 2
2 small classrooms (856, 872) for 24 not 25		- 2
C - support space okay		
TOTAL		-14
New program capacity (300 - 14) =	286	
Washington		
A - 2 kindergartens (966) for 16 not 25		-18
B - 3 classrooms become support space		-75
(33.5 x 404 = 13,534) ≈ (10,300 + 923 _ 923 = 13,069)		
TOTAL		-93
New program capacity (497 - 93) =	404	
Westmoreland		
A - 2 kindergartens (1,009, 998) for 33 not 50		-17
B - 2 small classrooms (865, 872) for 24 not 25		- 2
C - 1 classroom becomes support space		-25
(33.5 x 356 = 11,926) ≈ (9,483 + 862 = 10,345)		
TOTAL		-44
New program capacity (400 - 44) =	356	
Whiteaker		
A - 1 kindergarten (950) for 16 not 25		- 9
B - 2 small classrooms (643, 656) for 18 not 21		- 6
3 small classrooms (789, 791, 797) for 22 not 25		- 9
1 student room (635) for 18 not 21		- 3
C - support space okay		
TOTAL		-27
New program capacity (313 - 27) =	286	
Willagillespie		
A - 3 kindergartens (951) for 16 not 25		-27
B - 1 small classroom (792) for 22 not 25		- 3
C - support space okay		
TOTAL		-30
New program capacity (375 - 30) =	345	
Willakenzie		
A - 1 kindergarten (959) for 16 not 25		- 9
B - 1 small classroom (661) for 18 not 22		- 4
1 small classroom (682) for 19 not 22		- 3
1 small classroom (844) for 23 not 25		- 2
C - 2 classrooms become support space		-42
(33.5 x 356 = 11,926) ≈ (10,659 + 653 + 656 = 11,968)		
TOTAL		-60
New program capacity (416 - 60) =	356	

	Reduction in Program Capacity	New Program Capacity
Willard		
A - 1 kindergarten (874) for 15 not 25		-10
B - 13 small classrooms (862 to 875) for 24 not 25		-13
C - support space okay		
TOTAL		-23
New program capacity (401 - 23) =	378	
New program capacity GRAND TOTAL	10,640	
Present Enrollment (September 30)	10,105	
Extra pupil spaces	535	

RESEARCH, DEVELOPMENT, AND EVALUATION

December 11, 1975

MEMORANDUM

To: Larry Barber

From: Doug Parrish, R D & E

Subject: Criticism of Mr. Shellenbarger's Proposed Changes of Program Capacity.

In Mr. Shellenbarger's memorandum of Dec. ,1975, he states that current Program Capacities assigned to each school by the District are "unrealistically high". He proposes to reduce capacity levels in three ways:

1. He feels that kindergarten classrooms should be identified and treated in a different manner. Specifically, he states that kindergarten students should have 60 sq. ft. of space per student. Kindergarten classrooms are currently treated as general classrooms under both Optimum and Program Capacity formulas. This change would affect each elementary school differently, based of course, on the number of actual kindergarten rooms they have.

> Criticism: The burdern of proof would appear to be on Mr. Shellenbarger in establishing the proposition that kindergarten children should have so much more room than other primary level children. I can find no state or board policy that states they should have more room than is allocated to 1st, 2nd, or 3rd graders. Allowing 60 sq. ft. of classroom space per pupil is double that allocated to other class levels.

2. He wants the Program Capacity formula changed. He requests that it be based on 36 sq. ft. per student (instead of 30 sq. ft.) with an upper limit of 25 students per room. This would effectively lower the Program Capacity for each general classroom in the District between 900 and 500 sq. ft. in size. He feels that this should be done because schools with a preponderance of small classrooms are unfairly treated by the present formula. Such schools, with classrooms between 500 sq. ft. and 750 sq. ft., have approximately the same Program and Optimum capacities. (Although he does not mention it, they are also schools which do not have any special education classes). Examples of the schools he is referring to are as follows:

	Optimum Capacity	Program Capacity
Edison	328	328
Fox Hollow	185	184
Magladry	158	150
Spring Creek	510	505

Schools with large classrooms, on the other hand, have Program and

Optimum Capacity levels that are farther apart. Hence, the schools with larger classrooms will have more sq. ft. of classroom space per student than schools with smaller classrooms when their enrollments are at Program Capacity. In addition, because schools with smaller classrooms have Program Capacities that are closer to their Optimum Capacities, he feels that it forces the affected students into "state minimum standards and a relatively rigid educational program". Mr. Shellenbarger feels that Optimum Capacity levels for each school represent the state minimum standard for education, necessitate a rigid educational program, and are therefore, something to avoid.

Criticism: Mr. Shellenbarger is correct in seeing that schools with larger classrooms will have more space per student than will schools with smaller classrooms when their enrollments are at Program Capacity The District's Capacity Study states on page 345 that "neither capacity figure (Program or Optimum) completely ascertains the actual amount of educational space available to school children." The report then goes on to study the actual amount of educational space available per student at each school and compares such calculations to District wide averages.

Optimum Capacity figures emphatically do not represent the state minimum standards for education nor do they force schools into rigid educational programs. Only Maximum School Use figures, on pages 214-217, represent the state minimum standard capacity levels. Operationally the only difference between Optimum Capacity levels and Program Capacity levels is that Program Capacities set an upper limit of 25 students per classroom (instead of 30 as in Optimum) and recognize lower class sizes for special education classes - EMR, TMR, Deaf, EH, etc.

Optimum Capacity levels do not necessitate a rigid educational program. On page 218 the report states the Optimum School Use capacity figures are a compromise between two views: "(a) the public that assumes that every 900 square feet should accomodate 30 students, and (b) the professional educator who would like a space that comfortably meets all the requirements of his/her specific program". The following areas in schools are excluded entirely in the computation of Optimum Capacities:

a) cafeterias, multi-purpose rooms..
b) gymnasiums and all athletic rooms.
c) auditoriums
d) instructional materials rooms.
e) library
f) audio-visual centers, projection rooms, etc.
g) student offices (school store, student government, student yearbook, dark rooms, student paper, etc.)
h) counseling and guidance center
i) student lounges and snackbars
j) all classrooms below 500 sq. ft.
k) faculty work rooms, planning spaces, lounges

Optimum capacities simply do not necessitate a rigid educational program.

In addition, it should be noted that there is close to 20,000 sq. ft. of primary educational space in the elementary schools that was not counted in the calculation of either Program or Optimum capacities. Such space was excluded because it was below 500 sq. ft. in size. The space is composed of small classrooms, student rooms, study rooms, meeting rooms, etc. Some of the elementary schools with small classrooms have large amounts of such space. Fox Hollow, for example, has the highest total of small primary education space (2,548.57 sq. ft.) of any elementary school in the District.

3. And lastly, Mr. Shellenbarger's revisions touch on the question of unequal distributions of Ancillary space in the elementary schools. He proposes a solution which involves the following steps: 1) identify those schools which are below average in Ancillary Space, and 2) switch primary educational space to Ancillary functions in those schools. (It should be noted here, that Mr. Shellenbarger is concerned only with Support and Educational Ancillary Space and not with Maintenance Ancillary Space.) In short, the proposal would simply increase Ancillary Space by cancelling out classrooms. In addition, Mr. Shellenbarger bases his corrections on program capacity numbers and not the actual enrollments at each school. In other words, Mr. Shellenbarger studied each school as if it's enrollment were at Program Capacity and then asked the question of how much Ancillary Space the school should have if it has to meet District averages for Ancillary Space. He feels that studying current inequalities in the distribution of Ancillary Space based on actual enrollments creates "distortions" due to "low or inflated enrollments in some schools."

Criticisms: Addressing the last point above, I feel that studying unequal distributions of space based on the Program Capacities at each school does not ascertain the actual inequality that presently exists in the schools. Schools, most of them, are not at Program Capacity, nor are they likely to be under present trends. Looking at inequality based on actual, current enrollments determines the real amount of inequality that presently exists for "real" students in the District. This is what the Capacity Study was attempting to determine -- not potential inequalities if schools were at Program Capacity.

In reference to his other arguement, establishing equality of Ancillary Space by scratching classrooms, the following factors need to be considered. There are four possible "space" situations a school may find itself in:

1. It may be below average in both Ancillary and Primary Educational Space.

2. It could be below average on Ancillary Space but above average on Primary Educational Space.

3. It could be above average on Ancillary Space but below average on Primary Space.

4. It could be above average on both Ancillary and Primary Spaces.

Mr. Shellenbarger's revision focuses on only those schools in situation 1 and 2 above. His proposal is perhaps feasible for schools in situation #2, i.e., they have above average amounts of primary educational space per student and can perhaps afford to lose some classrooms. But for schools confronted with situation #1, his proposal would create more problems than it would solve. In essence, he would transfer primary educational space to Ancillary functions in those schools already short on educational space.

The following table lists those schools which are below average in both Ancillary and Primary Educational Space. The table lists the amount of Educational Space the schools are below average on and Mr. Shellenbarger's recommended additional losses:

School	Amount Under District Norm in Primary Educ. Space	No. of classrooms Mr. Shellenbarger recommends they lose.
1. Awbrey Park	2,810.49 sq. ft.	2 classrooms at 950 sq. ft. each
2. Bailey Hill	219.78 sq. ft.	1 classroom @ 858 sq. ft.
3. Edgewood	1,443.96 sq. ft.	0
4. Howard	2,445.30 sq. ft.	4 classrooms (3 @ 841 sq. ft. 1 @ 512 sq. ft.)
5. Santa Clara	3,131.56 sq. ft.	0
6. Silver Lea	3,470.30 sq. ft.	1 classroom @ 703 sq. ft.
7. Spring Creek	5,683.87 sq. ft.	2 classrooms @ 736 sq. ft.
8. Washington	841.74 sq. ft.	3 classrooms @ 923 sq. ft.
9. Westmoreland	3,380.15 sq. ft.	1 classroom @ 862 sq. ft.

In summary, equalizing Ancillary Space by transferring classroom space would not be a feasible alternative for at least a third of the elementary schools. Such a plan would only increase the unequal distribution of primary educational space in the District.

An additional criticism here is that the proposal does not examine schools which have an above average amount of ancillary space. Some schools have an extreme amount of ancillary space in reference to other schools. Lincoln Elementary, for example, is 7,145.83 sq. ft. above the District Norm in Support and Educational Ancillary Space while simultaneously being above average also on Primary Educational Space. Other schools are above average on Ancillary but below average on Primary Educational Space. Both types of schools, those in situations 3 and 4 described above, could transfer space from Ancillary functions to Primary Educational Space. But Mr. Shellenbarger dismisses this by stating "schools with more than average ancillary space were not assigned additional program capacity since it is unlikely that the space could be converted to classroom space." It is not unlikely at all at many schools. One has reason to believe that this possibilty was not examined because it would in effect raise the Program Capacity at several schools. Mr. Shellenbarger seems only interested in lowering it.

To conclude then, Mr. Shellenbarger's first two recommendations -- to identify kindergarten classrooms and to change the Program Capacity formula to 36 sq. ft. -- are possible alternatives to the present formulas. They are simply policy changes. His arguments for doing so are not strong, especially when he argues that Optimum Capacity is state minimum standards and creates a rigid educational program.

His third revision, however, in reference to attempting to equalize ancillary space, I consider to be untenable in that it acts to increase the unequal distribution of classroom space per student in a large number of schools. Significantly, it is by this revision that Mr. Shellenbarger is able to lower the program capacity for the whole district by so much. Switching classrooms to Ancillary functions accounts for a 625 student drop in elementary Program Capacity.